Germination Lab

Kit contains:

- 3 Seeds (red beans)
- Paper towels
- Strip of paper

You will need: masking tape, drawing supplies, a stapler, and a funnel (optional).

MORTON GROVE PUBLIC LIBRARY
6140 Lincoln Avenue, Morton Grove, IL 60053
Youth Info Desk: 847-929-5102 | mgpl.org

INSTRUCTIONS

Step 1. Fold the paper towels to the size of this kit's zip-top bag. Wet the paper towels with water and put them back in the bag.

Step 2. Put 5 staples in a line through the middle of the bag. (If you don't have a stapler, you can use one at the Youth Services desk.) Place your seeds in the bag above the staples.

Step 3. Write your name or initials on the strip of paper and tape to the bottom of the bag.

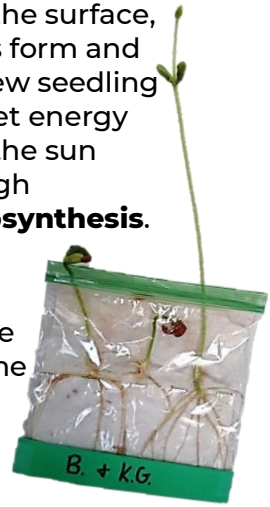
Step 4. Attach the bag to a sunny wall with masking tape.

Step 6. Observe daily. Log/draw interesting changes. You should see the first roots in 5–7 days. Add water as needed to keep paper towels damp (a funnel helps).

FROM SEED TO PLANT

Your beans are seeds that grow plants that grow more beans. Seeds lie **dormant** until conditions are right to **germinate**, or sprout. They need moisture, oxygen, light or dark, and the right temperature to grow. Once those conditions are met, the plant **embryo** starts growing inside the seed. The tough outer seed coat swells and splits. Then a root can grow downward and the shoot can grow upward. When the shoot emerges from the surface, leaves form and the new seedling can get energy from the sun through **photosynthesis**.

britannica.com/science/germination



For more information, watch the video, “How Does a Seed Become a Plant?” by SciShow Kids: https://youtu.be/tkFPyue5X3Q

Day:

Height:

Observations:

Day:

Height:

Observations:

Day:

Height:

Observations:

Day:

Height:

Observations:

Day:

Height:

Observations:

When your bean plants grow out the top of the bag, you can transplant them into soil in a sunny area. Your crop of beans will be ready to harvest approximately 85 days after the start of Germination Lab.